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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,433	11/07/2003	Ken Kawamata	12577/23	9400
23838	7590	07/13/2005	EXAMINER	
KENYON & KENYON 1500 K STREET NW SUITE 700 WASHINGTON, DC 20005			AMARI, ALESSANDRO V	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H/A

<b>Office Action Summary</b>	<b>Application No.</b> 10/702,433	<b>Applicant(s)</b> KAWAMATA ET AL.	
	<b>Examiner</b> Alessandro V. Amari	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-26 is/are allowed.
- 6) ☒ Claim(s) 1,3-9,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 2 and 10-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 4, 5, 7, 8, 17 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Erdogan et al US 6,809,859.

In regard to claim 1, Erdogan et al teaches (see for example, Figures 2, 6, 14) a fluorescence observing apparatus having an excitation filter unit (204) for transmitting only exciting light with particular wave-lengths, of illuminating light; and an absorption filter unit (210) for transmitting only fluorescent light produced from a specimen by irradiating the specimen with the exciting light to block the exciting light, wherein space between a half-value wavelength on a long-wavelength side of the excitation filter unit and a half-value wavelength on a short-wavelength side of the absorption filter unit is in a range of 6-12 nm as shown in Figure 6 wherein the excitation filter has an ultraviolet cutoff filter formed on a base plate as shown in Figure 14.

Regarding claim 3, Erdogan et al teaches that the excitation filter unit and/or the absorption filter unit includes a multilayer film comprised of at least 90 layers as described in column 11, lines 13-22.

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Regarding claim 4, Erdogan et al teaches that each of the excitation filter unit and the absorption filter unit includes a multilayer film comprised of SiO<sub>2</sub> and Ta<sub>2</sub>O<sub>5</sub> as described in column 8, lines 10-21 and as shown in Table 1.

Regarding claim 5, Erdogan et al teaches that the apparatus is incorporated in an optical system of a microscope as shown in Figure 2.

Regarding claims 7 and 8, Erdogan et al teaches that the apparatus is incorporated in an optical system of a microscope as shown in Figure 2, wherein each of the excitation filter unit and the absorption filter unit includes a multilayer film comprised of SiO<sub>2</sub> and Ta<sub>2</sub>O<sub>5</sub>, and the excitation filter unit and/or the absorption filter unit includes a multilayer film comprised of at least 90 layers as described in column 8, lines 10-21, column 11, lines 13-22 and as shown in Table 1.

Regarding claim 17, Erdogan et al teaches that the excitation filter has an infrared cutoff filter formed on a base plate as shown in Figure 6.

Regarding claim 18, Erdogan et al teaches that at least one of the excitation filter unit and the absorption filter unit has a filter that cuts off unwanted visible light that is formed on a base plate as shown in Figure 6.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erdogan et al US 6,809,859 in view of Salb US 5,408,996.

Regarding claims 6 and 9, Erdogan et al teaches the invention as set forth above and regarding claim 9 teaches that each of the excitation filter unit and the absorption filter unit includes a multilayer film comprised of SiO<sub>2</sub> and Ta<sub>2</sub>O<sub>5</sub>, and the excitation filter unit and/or the absorption filter unit includes a multilayer film comprised of at least 90 layers as described in column 8, lines 10-21, column 11, lines 13-22 and as shown in Table 1 but does not teach regarding claims 6 and 9 that the apparatus is incorporated in the optical system of an endoscope.

Regarding claims 6 and 9, Salb teaches a fluorescence observing apparatus incorporated in an optical system of an endoscope as shown in Figure 1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the fluorescence observing apparatus of Erdogan et al incorporated in an optical system of an endoscope as taught by Salb in order to provide for *in vivo* visual access to tissue under examination.

***Allowable Subject Matter***

5. Claims 19-26 are allowed.

6. Claims 2 and 10-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 2 and 19 are allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "variations in half-value wavelengths of the

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excitation filter unit and the absorption filter unit where humidity is changed from 10% to 95% are within 0.5 nm" as set forth in the claimed combination. Claims 10-16 are also allowable based upon their dependence on claim 2 and claims 20-26 are allowable based upon their dependence on claim 19.

The prior art of record, Erdogan et al and Salb teach a fluorescence observing apparatus having an excitation filter unit and an absorption filter unit, wherein space between a half-value wavelength on a long-wavelength side of the excitation filter unit and a half-value wavelength on a short-wavelength side of the absorption filter unit is in a range of 6-12 nm. However, the prior art does not teach that variations in half-value wavelengths of the excitation filter unit and the absorption filter unit where humidity is changed from 10% to 95% are within 0.5 nm and there is no motivation or teaching to modify this difference as derived.

### ***Response to Arguments***

8. Applicant's arguments filed 28 April 2005 have been fully considered but they are not persuasive.

The Applicant argues that Erdogan et al fails to disclose or even remotely suggest an ultraviolet cutoff filter formed on a base plate as claimed.

In response to this argument, the Applicant's attention is directed to Figure 6 which clearly shows that the excitation filter unit cuts off electromagnetic radiation in the ultraviolet range (i.e., less than 400 nm). This is also evidenced in column 5, lines 37-47 which refers to short-wave pass filter and a long wave pass filter which when combined with Figure 6 teaches that the excitation filter must have an ultraviolet cutoff

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filter in order to provide the response shown. Furthermore, given the broadest reasonable interpretation, the ultraviolet cutoff filter could also be taken to read as the UV light absorbing glass substrate (see column 14, lines 9-13) which is formed on a base plate, the base plate being taken to read on element 1402 or element 1406.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ava  
08 July 2005

  
MARK A. ROBINSON  
PRIMARY EXAMINER